

**CONCRETE NOTES:**

1. CODES AND STANDARDS (LATEST EDITION WITH CURRENT AMENDMENTS): ACI 301-"SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS", ACI 318-"BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE". COMPLY WITH APPLICABLE PROVISIONS, UNLESS OTHERWISE INDICATED.
2. STAGGER ALL CONTINUOUS REBAR LAP SPLICE LOCATIONS.
3. ALL HARDWARE EMBEDDED IN CONCRETE TO BE AS SIMPSON STRONG-TIE AS SHOWN ON PLANS, NO EXCEPTIONS.
4. ALL CONCRETE TO BE 4000 PSI @ 28 DAYS, 3/4" AGGREGATE, MAXIMUM WATER/CEMENT RATIO = 0.45, SLUMP 1" MINIMUM AND 3" MAXIMUM. USE A MID-RANGE WATER REDUCER IF A HIGHER SLUMP IS DESIRED. 6% AIR ENTRAINMENT FOR ALL CONCRETE AT PIERS AND FOOTINGS. CALCIUM CHLORIDE AND/OR MATERIALS CONTAINING CALCIUM CHLORIDE SHALL NOT BE USED.
5. NO CONCRETE TO BE PLACED ON FROZEN GROUND.
6. COMPLY WITH ACI 305 FOR ALL HOT WEATHER CONCRETE PLACEMENTS.
7. COMPLY WITH ACI 306 FOR ALL COLD WEATHER CONCRETE PLACEMENTS.
8. REINFORCEMENT ASTM A615, GRADE 60; NEW DEFORMED BARS.
9. REINFORCEMENT SHALL HAVE THE FOLLOWING MINIMUM CONCRETE COVER UNLESS OTHERWISE NOTED:
  - A. CONCRETE DEPOSITED ON GROUND: 3"
  - B. CONCRETE EXPOSED TO THE GROUND OR WEATHER: 2"
  - C. CONCRETE NOT EXPOSED TO THE GROUND OR WEATHER: 2"
10. ALL REINFORCEMENT TO BE DETAILED, FABRICATED, AND PLACED IN ACCORDANCE WITH THE "ACI MANUAL OF STANDARD PRACTICE" (ACI-315), LATEST EDITION.
11. ALL LAP SPLICES SHALL BE CONSIDERED CLASS B TENSION LAP SPLICES UNLESS OTHERWISE NOTED.
12. ALL WOOD NAILERS AND/OR SILLS IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED #2 GRADE SOUTHERN PINE OR BETTER.
13. CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING AND/OR BRACING REQUIRED UNTIL ALL CONCRETE HAS REACHED ITS FULL DESIGN STRENGTH.
14. PROVIDE BITUMINOUS DAMPROOFING FOR ALL BELOW GRADE CONCRETE.
15. FOUNDATION BACKFILL TO BE A CLEAN, WELL-GRADED, NON-FROST SUSCEPTIBLE SAND/GRAVEL STRUCTURAL FILL WITH NOT MORE THAN 5% PASSING THE #200 SIEVE.
16. REINFORCING OR ADDITIONAL ENGINEERING AS REQUIRED BY SITE CONDITIONS AND/OR LOCAL BUILDING CODES IS RESPONSIBILITY OF THE BUILDER AND/OR OWNER.

**FOUNDATION NOTES:**

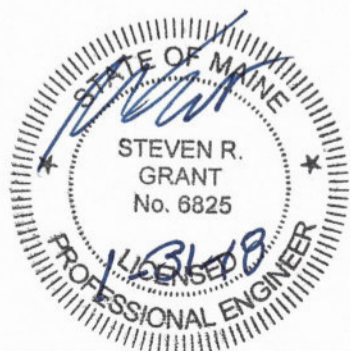
1. ALL FOUNDATIONS HAVE BEEN DESIGNED BASED ON AN ASSUMED SOIL BEARING PRESSURE OF 2000PSF.
2. THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BEAR A MINIMUM OF 4'-6" BELOW FINISHED GRADE; UNLESS NOTED OTHERWISE ON PLANS.
3. SUBGRADE EXCAVATIONS TO BE KEPT DRY.
4. IF ADEQUATE SOIL BEARING IS NOT ENCOUNTERED AT THE INDICATED BOTTOM OF FOUNDATION, THE CONTRACTOR IS TO REPORT TO THE ENGINEER BEFORE PROCEEDING WITH THAT PART OF WORK.
5. ALL EXISTING FILL, ORGANIC, WASTE, TOPSOIL, FROZEN MATERIALS, AND DELETERIOUS MATTER SHALL BE REMOVED FROM BELOW FOOTINGS AND REPLACED WITH COMPACTED STRUCTURAL FILL.
6. ALL DRAINAGE FILL TO BE 3/4" WASHED CRUSHED STONE.
7. ALL DRAINAGE PIPE TO BE SLOPED POSITIVELY AT LEAST 2% AND EXTEND TO DAYLIGHT AT GRADE, UNLESS OTHERWISE NOTED ON PLANS.
8. PROVIDE BITUMINOUS DAMPROOFING FOR ALL BELOW GRADE CONCRETE.
9. FOUNDATION BACKFILL AND SUB-SLAB STRUCTURAL FILL TO BE A CLEAN, WELL-GRADED, NON-FROST SUSCEPTIBLE SAND/GRAVEL STRUCTURAL FILL WITH NOT MORE THAN 5% PASSING THE #200 SIEVE.
10. NOTIFY ENGINEER IMMEDIATELY SHOULD LEDGE/BEDROCK BE ENCOUNTERED.

**ROOF AND FLOOR FRAMING NOTES:**

1. DESIGN LOADS ARE IN ACCORDANCE WITH THE 2015 IBC (INTERNATIONAL BUILDING CODE) PER THE MAINE UNIFORM BUILDING AND ENERGY CODE (MUBEC): DESIGN FLAT ROOF SNOW LOAD  $P_f = 46\text{psf}$  PLUS DRIFTING AND SLIDING SNOW; ( $P_g = 60\text{psf}$ ,  $C_e = 1.0$ ,  $I = 1.0$ ,  $C_t = 1.1$ ). DESIGN UNBALANCED SNOW LOAD = 60psf.
2. DESIGN 2<sup>ND</sup> FLOOR LIVE LOAD = 30psf, BALCONY LIVE LOAD = 45psf (1.5 TIMES 2<sup>ND</sup> FLOOR LIVE).
3. DEAD LOADS: ROOF = 15psf, FLOOR = 15psf.
4. ALL DIMENSIONAL FRAMING LUMBER INCLUDING STUDS (UNLESS NOTED ON PLANS) TO BE #2 GRADE SPF OR BETTER.
5. SOLID SAWN POSTS TO BE #1 GRADE SPRUCE-PINE-FIR OR BETTER (UNLESS NOTED OTHERWISE ON PLANS) SIZE AS INDICATED ON PLANS.
6. DO NOT SUBSTITUTE MULTIPLE "2x" MEMBERS FOR SOLID POSTS INDICATED.
7. POST CAPS TO BE SIMPSON LPC SERIES WITH Z-MAX PROTECTION, UNLESS NOTED OTHERWISE ON PLANS.
8. "LVL" INDICATES 1 3/4" WIDE LAMINATED VENEER LUMBER AS MANUFACTURED BY THE BOISE CASCADE CORPORATION HAVING THE FOLLOWING MINIMUM DESIGN PROPERTIES:  $E = 2,000,000\text{ PSI}$ ,  $F_b = 3,100\text{ PSI}$ ,  $F_v = 285\text{ PSI}$ .
9. **CONTRACTOR OPTION: MAY SUBSTITUTE "LVL" BUILT-UP BEAM WITH "VL" ONE-PIECE BEAM OF SAME SIZE.** "VL" INDICATES ONE-PIECE WIDTH LAMINATED VENEER LUMBER AS MANUFACTURED BY THE BOISE CASCADE CORPORATION HAVING THE FOLLOWING MINIMUM DESIGN PROPERTIES:  $E = 2,000,000\text{ PSI}$ ,  $F_b = 3,100\text{ PSI}$ ,  $F_v = 285\text{ PSI}$ .
10. ALL NAILS/FASTENERS PENETRATING INTO PRESERVATIVE TREATED (PT) LUMBER MUST BE HOT-DIPPED GALVANIZED OR STAINLESS STEEL.
11. ALL FLUSH FRAMED WOOD MEMBERS TO BE FRAMED WITH JOIST AND BEAM HANGERS WITH "Z-MAX" PROTECTION. ALL HOLES IN HANGERS TO BE FILLED WITH NAIL OR BOLT SIZE (AS RECOMMENDED BY MANUFACTURER) REQUIRED TO OBTAIN MAXIMUM SAFE WORKING LOAD OF CONNECTION.
12. ALL POSTS AND STUD COLUMNS SHALL BE CONTINUOUS TO FOUNDATION, OR SUPPORT FRAMING BELOW.
13. ALL BUILT-UP STUD COLUMNS AND SOLID SAWN BEAMS TO BE GLUED AND SPIKED TOGETHER WITH 16D SPIKES AT 8" o.c. AS FOLLOWS:  
UP TO 12" DEEP; ONE ROW TOP AND BOTTOM, STAGGERED.  
GREATER THAN 12" DEEP; 3 ROWS, STAGGERED.
14. ALL BUILT-UP LVL BEAMS (1 3/4" WIDE PLY) TO BE GLUED AND SCREWED TOGETHER WITH SIMPSON "SDW" SCREWS AT 12" o.c. AS FOLLOWS:  
2-PLY; ONE ROW TOP, MIDDLE, AND BOTTOM USING SDW 3 3/8" LONG SCREWS, STAGGERED.  
3-PLY; ONE ROW TOP, MIDDLE, AND BOTTOM USING SDW 5" LONG SCREWS, STAGGERED.  
4-PLY; ONE ROW TOP, MIDDLE, AND BOTTOM USING SDW 6 3/4" LONG SCREWS, STAGGERED.
15. ALL DIMENSIONAL FRAMING LUMBER EXPOSED TO THE WEATHER OR IN CONTACT WITH CONCRETE TO BE PRESERVATIVE TREATED #2 GRADE SOUTHERN PINE OR BETTER, UNLESS NOTED ON PLANS.
16. WHERE POSTS FRAME THROUGH FLOOR LEVELS, PROVIDE A CONTINUOUS LOAD PATH THROUGH FLOORS TO BEAM OR FOUNDATION BELOW. POSTS MAY BE SPLICED AT FLOOR LEVEL. PROVIDE SOLID BLOCKING WITH CROSS SECTIONAL AREA AND WOOD TYPE/GRADE EQUAL TO OR GREATER THAN POST ABOVE IF TOP AND BOTTOM POSTS ARE NOT IN CONTACT WITH EACH OTHER. UNLESS NOTED OTHERWISE, CONNECTIONS FOR ALL WOOD MEMBERS TO BE IN ACCORDANCE WITH THE IBC 2015 FASTENING SCHEDULE AS SHOWN IN TABLE 2304.10.1.
17. PROVIDE SIMPSON H2.5AZ FRAMING ANCHOR AT ALL RAFTER BEARING LOCATIONS.
18. PROVIDE SIMPSON H1Z FRAMING ANCHOR AT ALL BALCONY JOISTS BEARING ON NEW WALL, AND FIRST FLOOR JOISTS BEARING AT NEW EXTERIOR BEAM LINE.
19. RAFTER/JOIST SPACING SHOWN IS MAXIMUM AND MAY BE FRAMED LESS IF DESIRED.

**EXTERIOR WALL SHEATHING NOTES:**

1. SHEATH EXTERIOR FACE OF STUDS WITH CONTINUOUS 1/2" STRUCTURAL GRADE I PLYWOOD AND FASTEN WITH 8d x 0.131" DIAMETER NAILS @ 4" O.C. AT PANEL EDGES. 12" O.C. AT FIELD; BLOCKING IS NOT REQUIRED.
2. NAILS PENETRATING "PT" LUMBER TO BE EITHER HOT DIPPED GALVANIZED OR STAINLESS STEEL; SIZE AND SPACING AS INDICATED ABOVE.
3. NAILS PENETRATING NON-TREATED LUMBER TO BE HOT-DIPPED GALVANIZED; SIZE AND SPACING AS INDICATED ABOVE.



**NOONE RESIDENCE  
MUDROOM ADDITION**

6 KENDALL STREET, PORTLAND, MAINE 04103

DISCLAIMER:  
DRAWINGS WERE BASED ON CONTRACTORS SKETCHES AND PREPARED BY A DRAFTSPERSON AND NOT BY A LICENSED ARCHITECTURAL PROFESSIONAL. STRUCTURAL ELEMENTS PROVIDED AND REVIEWED BY STAMPING STRUCTURAL ENGINEER.

No.	Description	Date
0	ISSUED FOR PERMIT	01.31.18

**STRUCTURAL NOTES**

Project number	17010	<b>A1</b>
Date	01.31.2018	
Scale	1/4" = 1'-0"	

